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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,047	07/18/2001	Monte Mar	CYPR-C00173	8490

7590 07/06/2004

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EXAMINER
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MAI, TAN V

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/909,047	MAR, MONTE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tan V Mai	2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 2-19-02, 11-12-02 and 2-24-03.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-24-03</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per independent claims 1, 9 & 17, the terms "can be" are indefinite.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) he has abandoned the invention.

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

(f) he did not himself invent the subject matter sought to be patented.

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

3. Claims 1, 3, 5, 9, 11 and 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ryan et al (US Pat. 6,311,149).

As per independent claim 1, Ryan et al teach, e.g., see Figs. 3A-3B and 4A-4B, a programmable analog system comprising a reconfigurable hardware module (RHM) 325 and a reconfigurable front end (RFE) 330. Also, see col. 8, lines 47-58, col. 9, line 37 to col. 10, line 6 and col. 10, lines 44-51.

As per dependent claim 3, the claim adds "wherein said first set of analog blocks comprises a **first type** and a **second type**". Ryan et al's reconfigurable hardware module (RHM) 325 and a reconfigurable front end (RFE) 330 are considered claimed features.

As per dependent claim 5, the claim adds "wherein said plurality of analog blocks is arranged in an array having multiple columns and multiple rows". Ryan et al's Figs. 4A-4B show the claimed features.

Due to the similarity of claims 9, 11 and 13 to claims 1, 3 and 5, they are rejected under a similar rationale.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.<sup>7</sup>

5. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al.

As per dependent claim 8, the claim adds "wherein an analog block comprises a plurality of analog elements having **changeable characteristics**". Ryan et al disclose "[a]n FPAA is an integrated circuit which can be configured to implement various analog functions ..." (col. 10, lines 44-51). It implies that the FPAA have **changeable characteristics** as claimed.

Due to the similarity of claim 16 to claim 8, it is rejected under a similar rationale.

6. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al in view of either Anderson or Swanson.

Ryan et al have been discussed in paragraph 3 above.

As per dependent claim 2, the claim adds the "first set of analog blocks comprises **switched capacitor** blocks". The "**switched capacitor**" feature is old and well known in the art, e.g., see Anderson (col. 1, lines 20-27, col. 2, lines 20-39, col. 4, line 60 to col. 5, line 18) or Swanson (col. 2, lines 52-63, col. 8, line 63 to col. 9, line 14, col. 24, col. 45 to col. 25, line 30, and col. 30, lines 43—53). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to

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combine either Anderson or Swanson's "**switched capacitor**" feature in Ryan et al, thereby making the claimed invention, because the proposed device is a reconfigurable test instrument having a programmable analog system as claimed.

Due to the similarity of claim 10 to claim 2, it is rejected under a similar rationale.

7. Claim 4, 12, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al in view of Goricki.

Ryan et al have been discussed in paragraph 3 above.

As per dependent claim 4, the claim adds "wherein said second set of analog blocks comprises **continuous time** blocks". The "**continuous time**" feature is old and well known in the art, e.g., see Gorecki's Fig. 6. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Goricki's "**continuous time**" feature in Ryan et al, thereby making the claimed invention, because the proposed device is a reconfigurable test instrument having a programmable analog system as claimed.

Due to the similarity of claim 12 to claim 4, it is rejected under a similar rationale.

As per independent claim 17, the claim adds "**continuous time** blocks" and "**switched capacitor** blocks" in an array of analog blocks. Gorecki's Fig. 4 shows the interconnection between "**continuous time** blocks" and "**capacitor** blocks".

Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Goricki's "**interconnection**" feature in Ryan et al, thereby making the claimed invention, because the proposed device is a reconfigurable test instrument having a programmable analog system as claimed.

As per dependent claim 21, the claim details the function of the array. Ryan et al disclose "[a]n FPAA is an integrated circuit which can be configured to implement **various analog functions ...**"( col. 10, lines 44-51)

As per dependent claim 22, due to the similarity of claim 22 to claim 8, it is rejected under a similar rationale (see paragraph #5 above).

8. Claims 6-7, 14-15 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

10. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest (1) the detail interconnection between continuous time blocks and switched capacitor blocks as recited in dependent claims 6, 14 & 19, (2) the "analog block in a column is coupled to a respective digital bus" as recited in dependent claims 7, 15 & 20, and (3) the "switched capacitor blocks comprises a first type and a second type" as recited in dependent claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (703) 305-9761. The examiner can normally be reached on Tue-Fri from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are:

After-final (703) 746-7238

Official (703) 746-7239

Non-Official/Draft (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



TAN V. MAI  
PRIMARY EXAMINER